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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/605,315	09/22/2003		Joseph G. Supina	81044241/201-1453	2314
28395	7590	04/07/2006		EXAMINER	
		AN P.C./FGTL	AVERY, BRIDGET D		
1000 TOWN 22ND FLOO		R	ART UNIT	PAPER NUMBER	
SOUTHFIE	LD, MI	48075-1238	3618		
	•			DATE MAILED 04/07/0000	

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Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/605,315	SUPINA ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Bridget Avery	3618			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHC WHIC - Extens after S - If NO - Failure Any re	DRTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DASIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing d patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI	ely filed the mailing date of this communication. O (35 U.S.C. § 133).			
Status						
2a)⊠ 3)□	Responsive to communication(s) filed on <u>12 Ja</u> This action is FINAL . 2b) ☐ This Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final. nce except for formal matters, pro				
Dispositio	Disposition of Claims					
5) \(\begin{array}{c} 4 \\ 5) \(\begin{array}{c} 6 \\ 7) \(\begin{array}{c} 1 \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Claim(s) 1-11 is/are pending in the application. Ia) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-11 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or					
Application	on Papers					
10) T	The specification is objected to by the Examine. The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the objection drawing sheet(s) including the correction is objected to by the Examine.	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).			
Priority u	nder 35 U.S.C. § 119					
a)[Acknowledgment is made of a claim for foreign All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau see the attached detailed Office action for a list of	s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage			
	of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)			
2) D Notice 3) Inform	of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date	Paper No(s)/Mail Da				

Art Unit: 3618

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 1. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al. (US Patent 5,887,670) in view of Taniguchi et al. (US Patent 5,846,155).

Tabata et al. teaches a hybrid electric wheeled vehicle powertrain similar to applicant's including:

- An internal combustion engine
- An electric motor/generator
- A battery
- A geared transmission including a carrier, a ring gear coupled to the engine and a sun gear coupled to a rotor shaft
- A first reaction brake () anchoring the ring gear as the engine drives the electric generator during operation of the powertrain in a forward driving power delivery mode
- A clutch between the ring gear and a torque output element (26)
- The motor, with the clutch disengaged, is isolated from the ring gear during
 reverse drive and the engine drives the generator to charge the battery through a

torque flow path that is isolated by the clutch from a reverse drive torque flow path

- A second reaction brake anchoring the ring gear as the engine drives the torque output element (26) with the clutch engaged during a split delivery mode in a forward driving direction
- The second reaction brake acting on the sun gear to effect engine starting torque delivery from the generator to the engine as the generator functions as an engine starter torque source
- A second clutch connecting two gear elements

Tabata et al. lacks the teaching of a reaction brake that anchors a ring gear during a reverse driving power delivery mode.

Taniguchi et al. teaches a reverse brake that anchors a ring gear during a reverse driving power delivery mode, as taught in column 8, lines 55-62 and column 15, lines 32-48. Note, Taniguchi et al. further teaches a clutch engaged during operation of the powertrain in a split-power deliver mode in a forward driving direction.

Based on the teachings of Taniguchi et al., it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to provide a brake that anchors the ring gear during reverse driving power delivery mode to provide multiple modes of operation by designating a motor mode to drive the vehicle by the motor-generator while the engine is in an idling state to enhance efficiency.

Response to Arguments

2. Applicant's arguments with respect to claims 1-8 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

3. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4. Any inquiry concerning this communication should be directed to Bridget Avery at

telephone number 571-272-6691.

March 31, 2006

CHRISTOPHER P. ELLIS SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 3600